

**IN THE DRAWINGS:**

Attached is a Submission of Replacement Drawing Sheets including a change to each of Figs. 11 and 12. These Replacement Drawing Sheets, which include all of Figs. 1-12 in this application, replace the previously-filed drawing sheets. In these Replacement Drawing Sheets, Figs. 11 and 12 have been amended to include the legend "PRIOR ART" in response to the objection to the drawings in the Office Action.

**REMARKS**

**Summary of the Office Action**

The drawings stand objected to because Figs. 11 and 12 are allegedly not labeled corrected.

The abstract stands objected to because of its alleged "excessive length."

Claims 1-8 stand provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 10/504,979.

Claims 1-10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Niigaki et al. (U.S. Patent No. 5,982,094) (hereinafter "Niigaki '094").

Claims 1 and 9-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Niigaki et al. (U.S. Patent No. 5,986,387) (hereinafter "Niigaki '387")

**Summary of the Response to the Office Action**

Applicants have amended claim 1 and added new claim 14 to differently describe embodiments of the disclosure of the instant application's specification. Accordingly, claims 1-14 are currently pending for consideration. A Terminal Disclaimer is concurrently filed herewith. A Submission of Replacement Drawing Sheets is concurrently filed herewith. The previous abstract is replaced with a new abstract.

**Objection to the Drawings**

The drawings are objected to because Figs. 11 and 12 should allegedly each be designed by a legend such as “Prior Art”. In the Submission of Replacement Drawing Sheets filed concurrently herewith, Applicants have amended the drawings by labeling Figs. 11 and 12 as “Prior Art”. Accordingly, Applicants respectfully request that the objection to the drawings be withdrawn.

**Objection to the Abstract**

The abstract stands objected to because of its alleged “excessive length.” In response, Applicants have replaced the previous abstract with a new abstract in light of the Examiner’s comments in section 4 of the Office Action. Accordingly, Applicants respectfully request that the objection to the abstract be withdrawn.

**Double Patenting Rejection**

Claims 1-8 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 10/504,979. While Applicants do not necessarily concede to this rejection, Applicants submit a Terminal Disclaimer to facilitate allowance of the present application, thereby obviating the double patenting rejections. Accordingly, Applicants request that the double patenting rejections be withdrawn.

**Rejections under 35 U.S.C. § 102(b)**

Claims 1-10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Niigaki '094. Claims 1 and 9-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Niigaki '387. Applicants have amended claims 1 and added new claim 14 to differently describe embodiments of the disclosure of the instant application's specification. To the extent that these rejections might be deemed to apply to the claims as newly-amended, they are respectfully traversed for at least the following reasons.

In the Office Action, the Examiner takes a position that Niigaki '094 discloses, in Fig. 7,

“a transmission secondary electron emitter which emits secondary electrons [e-] generated by the incidence of primary electrons (which is h $\nu$ ; see Fig. 7); the transmission secondary electron emitter comprising (1) a secondary electron emitting layer [30] ... and (2) a voltage applying means for applying a predetermined voltage ... between the surfaces of the incidence and the emission of the secondary electron emitting layer [30].”

Applicants respectfully traverse this interpretation because in Niigaki '094, “30” in Fig. 7 is a photocathode, and “h $\nu$ ” is an incident light. See col. 7, line 53 to col. 8, line 11 of Niigaki '094. On the other hand, in the transmission secondary electron emitter of the embodiments of the instant application, secondary electrons are generated by the incidence of primary electrons, as described in independent claim 1 of the instant application.

Even further, in Niigaki '094, a positive voltage is applied by an anode 40 between the photocathode 30 and the anode 40. See col. 7, lines 16 to 21 of Niigaki '094. On the other hand,

in the voltage applying arrangement of the transmission secondary electron emitter of embodiments of the instant application, as described in independent claim 1, a voltage is applied between the surfaces of the incidence and the emission of the secondary electron emitting layer.

Applicants respectfully submit that by the utilization of this novel and advantageous configuration, an electric field is formed in the secondary electron emitting layer, the secondary electrons generated in the secondary electron emitting layer are accelerated in the direction to the surface of the emission by the electric field, and thereby the efficiency for emitting the secondary electrons outside of the transmission secondary electron emitter is improved.

In order to emphasize this advantageous feature, Applicants have opted to amend the combination of independent claim 1 to further describe the voltage applying means as being provided “for applying a predetermined voltage between the surfaces of the incidence and the emission of the secondary electron emitting layer to form an electric field in the secondary electron emitting layer,” as described in the instant application’s specification.

For at least the foregoing reasons, Applicants respectfully submit that the disclosure of Niigaki ‘094 is completely different from that of the transmission secondary electron emitter of embodiments of the disclosure of the instant application. Applicants also respectfully submit that similar arguments apply regarding the configuration disclosed in Niigaki ‘387 which is thus completely different from that of the transmission secondary electron emitter of embodiments of the disclosure of the instant application.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. § 102(b) should be withdrawn because neither of Niigaki ‘094 or Niigaki ‘387 teach or suggest each feature of independent claim 1, as amended. As pointed out in MPEP § 2131, “[t]o anticipate a

claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987)." Furthermore, Applicants respectfully assert that dependent claims 2-13, as well as newly-presented dependent claim 14, are allowable at least because of their dependence from newly-amended independent claim 1, and the reasons set forth above.

### **CONCLUSION**

In view of the foregoing, Applicants submit that the pending claims are in condition for allowance, and respectfully request reconsideration and timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution. A favorable action is awaited.

**EXCEPT** for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including

any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573.

This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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